Ambrosia pumila (San Diego Ambrosia)

Introduction

The MSCP Biological Monitoring Plan (1996) identifies Santee as an *Ambrosia pumila* monitoring location. Because the City of San Diego's Mission Trails *Ambrosia pumila* population is nearby the BMP-identified location, it has been monitored by the City since 1999.

Results/Analysis

The San Diego Ambrosia (*Ambrosia pumila*) populations at Mission Trails Regional Park were visited on July 14, 2005. At that time, over half of the main monitoring population (C6) had flowered and dried up (see site photos). Prior to 2005, the species flowered and was monitored in August. One potential explanation for the early senescence of above-ground plant mass is the fact that rains began relatively early during the 2004/2005 rain season.

The main Ambrosia population site was photographed, and the transplanted Ambrosia site was also visited and photographed during the 2005 site visit (Figures 2 and 3).

Based on discussions with Dr. Kathryn McEachern, staff had planned to flag and map the population, then (re) randomly allocate transects within the population area, rather than in the core population area only, as in previous years. However, due to the difficulty in locating stems among other dried vegetation, it was determined that a population boundary would not be reliable. Because the species is above ground most of the year, the species can be monitored prior to August for presence/absence surveys (i.e., non-demographic surveys) in future years. Staff has proposed performing *A. pumila* monitoring early in 2006, before the bulk of the other monitoring work, since surveys could not be performed in 2005.

Management Recommendations

Many of the *Ambrosia pumila* sites at Mission Trails are also support significant non-native grass populations (e.g., *Avena barbata, Bromus* sp.), which should be controlled.

Additionally, the spread of shrubby (native or non-native) species should be monitored. *A. pumila* historically grows on high floodplains; with the advent of damming throughout the area, these areas no longer flood and may type-convert over time as a result.

Mission Trails Regional Park, July 14, 2005

Ambrosia pumila at Mission Trails quantitative monitoring site (C6)

Panorama of *Ambrosia pumila* quantitative monitoring site (C6), near parking lot fence, facing north (July 14, 2005; photos merged using Canon PhotoStitch, v. 3.1)

Figure 1. Panorama of *Ambrosia pumila* transplant site, taken from adjacent trail facing west (July 14, 2005; photos merged using Canon PhotoStitch, v. 3.1).